

Figure 1: Drawing of experimental apparatus





Figure 2a and 2b: Pictures of experimental apparatus



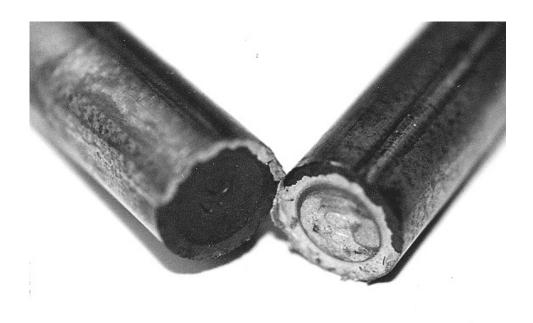
Figures 3a: Destructive result of the sample sent to EPRI (partial immersion, dished pellets, no-void specimen)



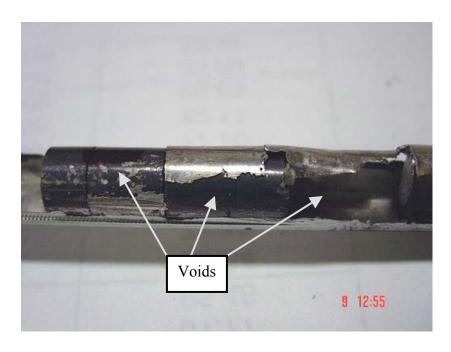
Figures 3b: Destructive result of the sample sent to EPRI (partial immersion, dished pellets, no-void specimen)



Figures 3c: Destructive result of the sample sent to EPRI (partial immersion, dished pellets, no-void specimen)



Figures 3d: Liquid metal in the dished region



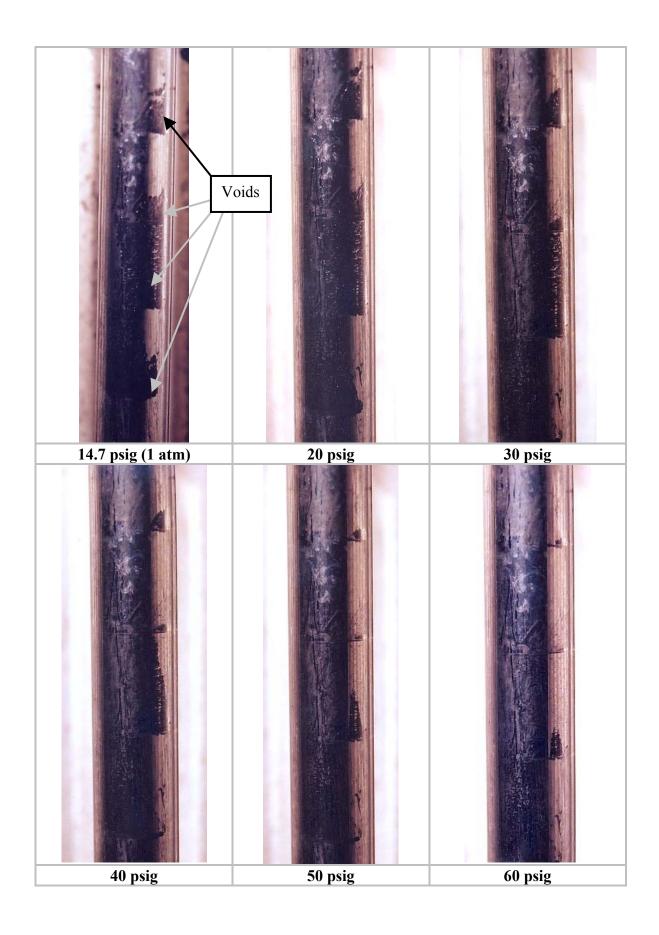
Figures 3e: Destructive result of the sample sent to EPRI (partial immersion, dished pellets, void specimen)

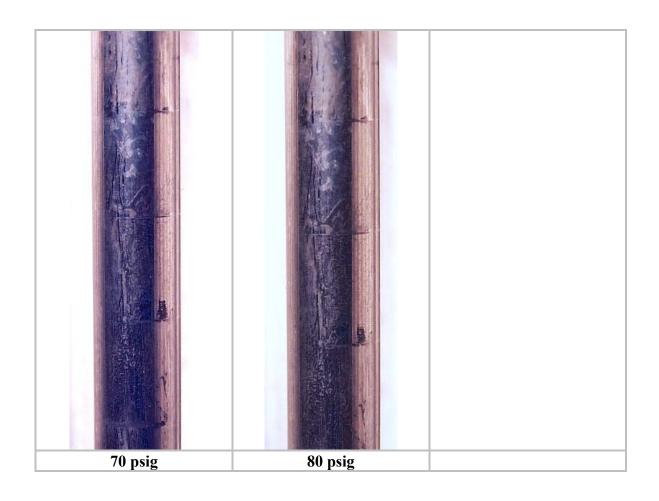


Figures 3f: Destructive result of the sample sent to EPRI (partial immersion, dished pellets, void specimen)

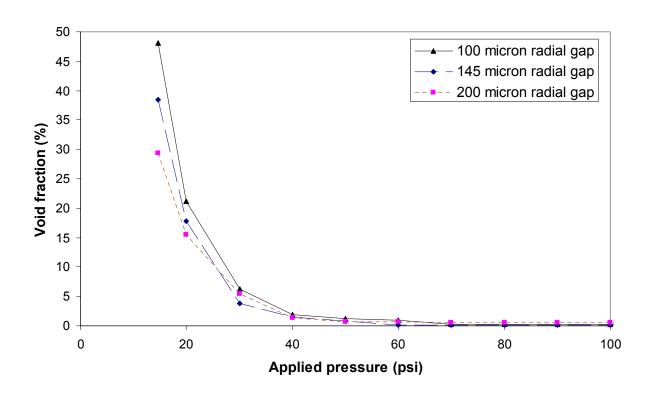


Figures 3g: Destructive result of the sample sent to EPRI (partial immersion, dished pellets, void specimen)

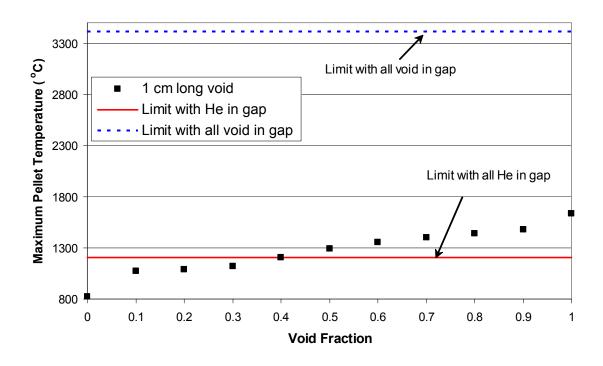




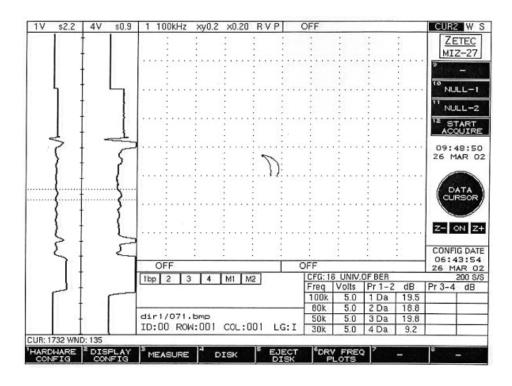
Figures 4a – 4h Progression of void as a function of pressure (glass tube, full immersion, dished pellets).



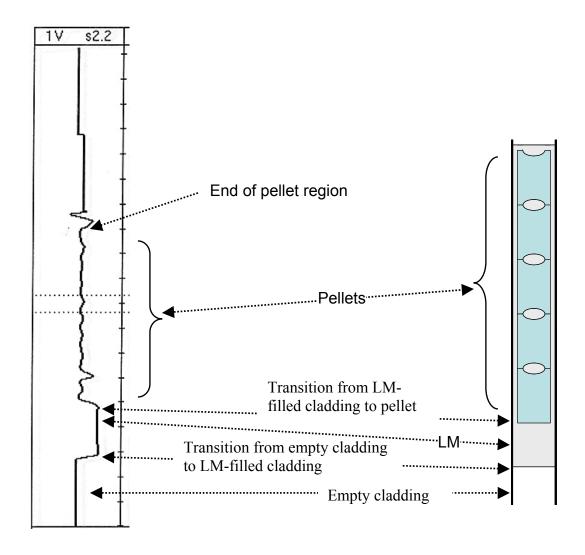
Figures 5: Void fraction vs pressure for 100, 145, and 200 microns gap sizes (glass run, full immersion, dished pellets)



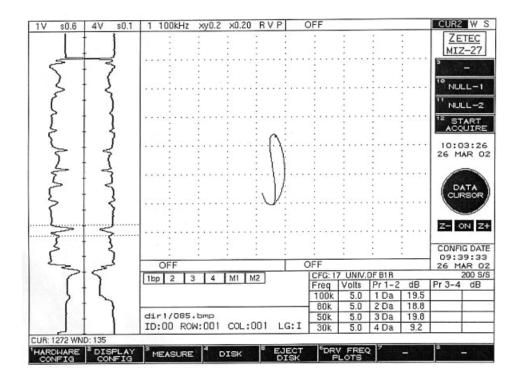
Figures 6: Fuel maximum temperature vs. void fraction (Westinghouse Mk-1 spec. radial gap ~ 100 microns, LHR = 270 W/cm)



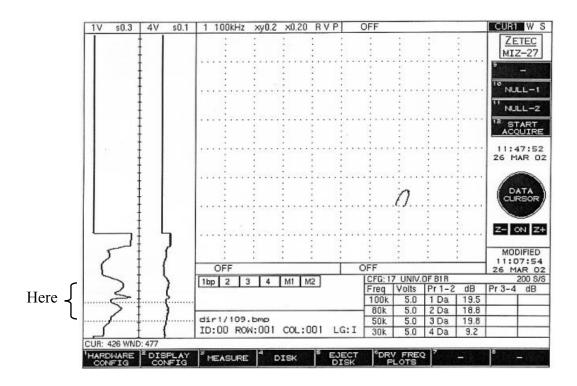
Figures 7a: Eddy current signal from encircling probe (no-void, EPRI sample)



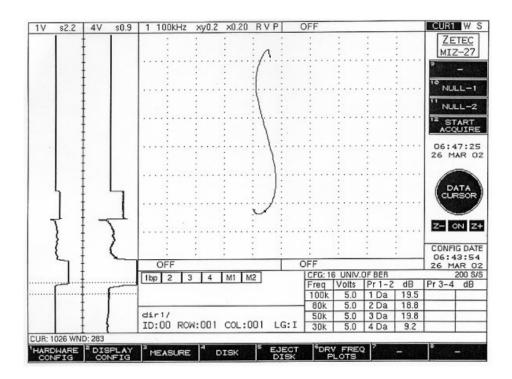
Figures 7b: Matching of the encircling probe signal to the specimen (no-void, EPRI sample)



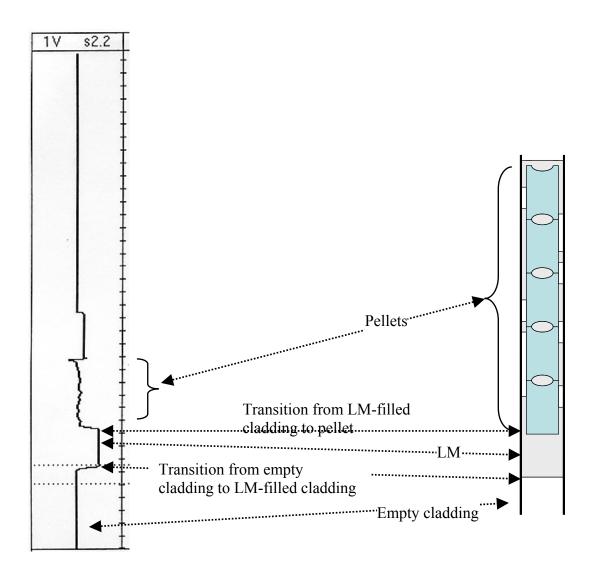
Figures 7c: Signals from pencil probe (axial scan, pellet region, no-void sample)



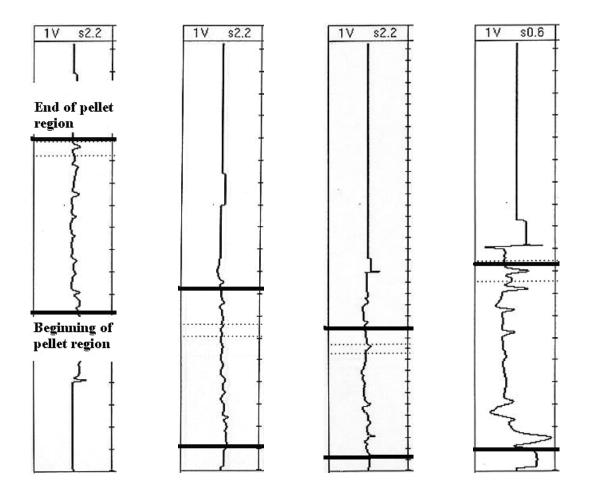
Figures 7d: Signals from pencil probe (circumferential scan, pellet region, no-void sample)



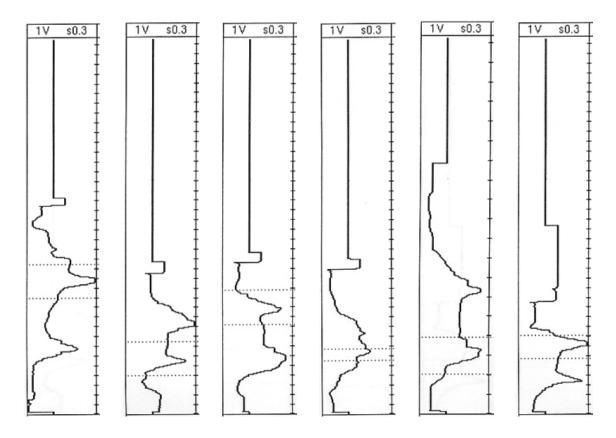
Figures 8a: Signals from encircling probe (void sample)



Figures 8b: Matching of the encircling prove signal to the specimen (void sample)



Figures 8c – 8f: Signals from axial scans at 90° apart (void sample, pencil probe)



Figures 8g-8l: Signals from circumferential scan at different heights (void sample, pencil probe)